



Astex Environmental Services, Inc.
123 Catalpa · San Antonio, TX 78209
Phone: (210) 828-9800 · Fax: (210) 829-4927

May 9, 2008

Mr. Lucas Oliva
Design Manager Real Estate Services
San Antonio Housing Authority
818 S. Flores
San Antonio, Texas 78204
Phone: (210) 477-6004
Email: lucas_oliva@saha.org

RE: Limited Mold Inspection, 1519 Villa Flores, San Antonio, Texas
Astex Project #AES-08-J-4871

Dear Mr. Oliva,

Pursuant to your request, on May 6, 2008, Mr. Ron Greenberg of Astex Environmental Services, Inc. (AES), Texas Department of State Health Services (TDSHS) Mold Assessment Consultant MAC 0509 conducted a Limited Mold Inspection within the unoccupied home at 1519 Villa Flores, San Antonio, Texas to investigate the general microbial conditions in the home prior to sale.

It should be noted that Astex inspected three residences within the same block and the two outside comparison/control samples were taken in the front of 1515 and 1519 Villa Flores and in the backyard of 1710 Villa Placer and both samples are shown on all three reports since they are being used as control levels for all three properties.

Scope of Work

The scope of work for this limited inspection included the collection of the following samples:

- Air samples (Allergenco brand cassettes) were collected in the following locations for the analysis of Total Bioaerosols:
 1. inside – at the return air intake - 1 sample
 2. inside – hallway between bedrooms - 1 sample

3. inside – master bedroom – 1 sample
4. outside comparison/control samples - 2 samples (see note above)

Note: These samples were delivered to the contract lab, Crisp Analytical Laboratories, LLC, 2081 Hutton Dr., Carrollton, Texas 75006, for analyses in accordance with the American Industrial Hygiene Association (AIHA) Environmental Microbiology Laboratory Accreditation Program (EMLAP) as well as following the Food and Drug Administration (FDA) Good Laboratory Practice Guidelines.

Visual and Moisture Inspection Results

No visible mold and/or evidence of water intrusion were observed within the house or garage and no indications of moisture within the wall materials was noted.

Temperature and Humidity Levels

Temperature readings within the house were from 78.2 to 82.2 degrees Fahrenheit and humidity was noted to be between 46.9 to 52.9 percent

Analytical Results

The Allergenco Air Samples were collected by Astex personnel on the morning of May 6, 2008 and were delivered to the contract lab for analysis of total bioaerosols with the results being made a part of this report. The data generated in this report is based on the samples and accompanying information provided and represents concentrations at a point in time under the conditions sampled. Keep in mind, sample values fluctuate widely and single point-in-time samples can be highly variable.

Currently, there are no regulations, federal or state, establishing action limits for mold spores and mold particulates in indoor air. Also, there are no species of molds identified to be hazards to public health. Current practice is to compare interior to exterior samples, noting the species present and the contrasting levels of spores and particle.

During this limited investigation, the following observations were noted:

Fungal Spores (Allergenco):

- The indoor air reported low levels of total fungal spores (624 to 1,056 count/M³) compared to outdoor air (4,272 to 8,448 count/M³) and although the distribution of spores was typical of outdoor air with *Cladosporium* being the dominant type, slightly elevated levels of *Aspergillus/ Penicillium*-like spores (336 count/M³) indoors versus 144 count/M³ outside and *Perconia/Myx* (144 count/M³) inside versus 48 count/M³ in the outside air.

Conclusions/Recommendations

- Due to the elevated levels of *Aspergillus/Penicillium*-like spores, with no discernable source and *Perconia/Myx* reported indoors in comparison with the outdoor levels on the day of the investigation, the living room/return and hallway should be scheduled for cleaning by a mold abatement company. An air scrubber should be placed in close proximity of the HVAC return and in the hallway between all of the bedrooms and at a minimum, those specific areas should HEPA vacuumed and sanitized.

Previous or future changes in mold concentrations cannot be inferred from these sample results. Please contact me at 210-828-9800 with any questions.

Very truly yours,



Ron Greenberg
Texas Department of State Health Services (TDSHS)
Mold Assessment Consultant No. MAC 0509

Attachments: Chain of Custody
 Laboratory Results

Crisp Analytical Labs, L.L.C. / C.A. Labs, L.L.C. / Crisp Analytical Labs at Houston, L.L.C.

Client: Astex Inc. Allergenic Particle Report CA Lab Project #: CAL08053140 Date:05/07/08
 Address: 123 Catalpa San Antonio, TX 7820 Analysis: Light Microscopy identification of pollen/fungal spore per CA Labs Air-o-cell method page #1
 Ron Greenburg Sample media : Air-o-cell / Cyclex D (airborne) Villa Flores/Villa Placer AES-08-J-4871

Sample # Location Volume	4871-01 Outside 1515-1519 VFVP 75		4871-02 Outside Rear 1710 VP 75		Total Cnts. / m3	Per- cent	Total Cnts. / m3	Per- cent
	Cnts. / m3	Per- cent	Cnts. / m3	Per- cent				
Alternaria	7	96	2.2	40	528	6.3		
Ascomycetes	22	288	6.7	72	960	11.4		
Basidiomycetes	18	240	5.6	32	432	5.1		
Botrytis								
Chaetomium								
Cladosporium	263	3,504	82.0	446	5,952	70.5		
Curvularia	4	48	1.1	4	48	0.6		
Drechslera/Bipolaris				11	144	1.7		
Epicoccum	4	48	1.1	7	96	1.1		
Oidium/Pero								
Nigrospora	4	48	1.1	7	96	1.1		
Penicillium/Asp				11	144	1.7		
Periconia/Myx				4	48	0.6		
Phthomyces								
Pseudo/Cercospora								
Rust								
Smut								
Stachybotrys								
Pollen	4	48		4	48			
Hyphae	7	96		11	144			
Particulate	4	48		4	48			
	320	4,272		634	8,448			
Total	Cnts. / m3	Per- cent	Total Cnts. / m3	Per- cent	Total Cnts. / m3	Per- cent	Total Cnts. / m3	Per- cent

Crisp Analytical Labs, L.L.C. 2081 Hutton , Suite 301 Carrollton, TX 75006

Dallas Baton Rouge Houston

Analyst - Chad Lytle

General Manager - Leslie Crisp

**INDOOR AIR QUALITY
ALLERGENIC PARTICLE
LABORATORY ANALYSIS REPORT**

Astex Inc.
123 Catalpa
San Antonio, TX 78209
phone: 210-528-9800
fax: 210-829-4927
reference number: CAL08053140

PO #:
Turnaround Time: 24 Hours
Received: 05/07/08 8:30 am

LABORATORY ANALYSIS METHOD:

Summary of light microscopy analysis of allergenic particles in tape or air cassettes. Tape lift samples indicate presence or absence and identification of known allergenic particles. Air cassettes can be quantified in airborne concentrations (total counts/m³). Pollen and fungus type qualifications are based on keys and reference standards for known allergenic types. Sample analysis is performed by professionally trained individuals. This test report relates only to items tested. This report does not imply endorsement by any US Government agency. This report may not be reproduced except in full, without written permission from CA Labs. CA Labs - Dallas is accredited by AIHA for viable fungi analysis.

These results are submitted pursuant to CA Labs' current terms and condition of sale, including the company's standard warranty and limitation of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. If there are concerns about health aspects of known allergens, consult a physician. Pollen and spore types identified are all naturally occurring and may grow anywhere in a natural environment where water is present. While it is normal for fungi to be present inside buildings from outside sources, growth occurs in humid conditions. Fungi cannot spread from building to building, as it is always present, but may not be growing. To control allergens in an area, drying and use of HEPA filters are recommended. Bias is present in all types of spore trap cassettes by particle size, capture, spread and counting procedure used. Quantification is susceptible to variance of 100% and standard deviation fo 200%. Unless notified in writing to return samples covered by this report, CA Labs will store the samples for thirty (30) days before discarding. A shipping and handling fee may be assessed for the return of any samples. This method is not covered by the scope of NVLAP or AIHA accreditation.

This report is intended for the recipient, only. Please notify us if you have received this document in error
(we will advise you to destroy or return this document.)

Analysis performed at Crisp Analytical Labs, L.L.C. 2081 Hutton Dr. Suite 301
Carrollton, TX 75006; phone (972)488-1414, fax (972)488-8006, after-hours
mobile (214)564-8366.

Crisp Analytical Labs, L.L.C. / C.A. Labs, L.L.C. / Crisp Analytical Labs at Houston, L.L.C.

Client: Astex Inc. Allergenic Particle Report CA Lab Project #: CAL08053142 Date: 05/07/08
 Address: 123 Catalpa San Antonio, TX 7820 Analysis: Light Microscopy identification of pollen/fungal spore per CA Labs Air-o-cell method Project name: 1519 Villa Flores AES-08-J-4871 page #1
 Attn: Ron Greenburg Sample media : Air-o-cell / Cyclex D (airborne)

Sample #	4871-11 Inside Return		4871-12 Inside Hall Between BR's		4871-13 Inside M. Bedroom		Total	Cnts./m3	Per cent		
	Cnts.	Per cent	Cnts.	Per cent	Cnts.	Per cent					
Alternaria											
Ascomycetes	4	48	4.5		7	96	15.4				
Basidiomycetes	4	48	4.5								
Botrytis											
Chaetomium											
Cladosporium	32	432	40.9	36	480	76.9	40	528	84.6		
Curvularia											
Dreschslera/Bipolaris	4	48	4.5								
Epicoccum											
Oidium/Pero											
Nigrospora	4	48	4.5								
Penicillium/Asp	25	336	31.8								
Periconia/Myx	7	96	9.1	11	144	23.1					
Pithomyces											
Pseudo/Cercospora											
Rust											
Smut											
Stachybotrys											
Pollen	7	96		4	48		4	48			
Hyphae	4	48		4	48		4	48			
Particulate	79	1,056		47	624		47	624			
Total	Cnts.	Per cent	Total	Cnts./m3	Per cent	Total	Cnts./m3	Per cent	Total	Cnts./m3	Per cent

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 Dallas Baton Rouge Houston
 Analyst - Chad Lyle General Manager - Leslie Crisp

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